

UNION ELECTRIC COMPANY

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ST. LOUIS, MISSOURI

May 11, 1979

JOHN K. BRYAN
VICE PRESIDENT

MAILING ADDRESS:
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ST. LOUIS, MISSOURI 63166

Mr. James G. Keppler
Regional Director, Region III
United States Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, IL 60137

ULNRC -314

Dear Mr. Keppler:

NUCLEAR REGULATORY COMMISSION IE BULLETIN NO. 79-03

Reference: J. G. Keppler letter of March 12, 1979

Attachments: 1) Callaway Pipe Spool Listing

Your letter dated March 12, 1979 forwarded for review and follow-up action IE Bulletin No. 79-03 concerning ASME SA-312 type 304 fusion welded stainless steel pipe manufactured by Youngstown Welding and Engineering Company prior to mid-November, 1978. The following data concerning the use or potential use of fusion welded pipe spools manufactured by Youngstown has been developed and is forwarded as an interim response to the subject Bulletin. This data has been developed generically to all five (5) SNUPPS Units. The need for additional actions applicable specifically to Callaway Units 1 and 2 will be indicated in the follow-up response. The items below are numbered to coincide with action items listed in the NRC Bulletin.

1. A survey of current SNUPPS suppliers of pipe spools and preassembled pipe formations indicates that only Dravo Corporation, Marietta, Ohio has supplied pipe spools containing fusion welded SA-312 type 304 pipe (without filler material) manufactured by Youngstown Welding and Engineering Company. To date, the total number of Dravo supplied pipe spools shipped to Callaway and Wolf Creek sites containing Youngstown-manufactured materials is 65 and 70, respectively. To date there have been no pipe spools of any type fabricated for or shipped to Sterling or Tyrone sites. Dravo is currently in the process of identifying other spools in fabrication which they plan to ship to SNUPPS job-sites and which contain the referenced fusion welded pipe. This review process will continue until sufficient data has been obtained concerning the quality and acceptability of the Youngstown pipe being furnished for SNUPPS.

2. As indicated in Item 1, above, a total of 65 and 70 pipe spools containing fusion welded SA-312 type 304 pipe

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manufactured by Youngstown have to date been shipped to Callaway and Wolf Creek sites, respectively. A listing of pipe spools indicating system application, spool/line numbers, size and design pressure/temperature has been prepared for the Callaway site and is enclosed with this letter report. A supplemental listing indicating pipe spools currently in fabrication and subsequently shipped to Callaway will be furnished in a follow-up to this interim report.

3. Each longitudinal weld seam of fusion welded SA-312 type 304 pipe procured from Dravo which was manufactured by Youngstown and is presently on site at Callaway will be ultrasonically examined. This examination will be limited only by accessibility considerations which according to preliminary site data will impact fewer than 10 percent of the total number of spools previously installed. The examination procedure, reference standards and acceptance criteria shall be in accordance with Paragraph NC-2552 of the 1977 edition of ASME Section III Code. Any repairs requiring welding shall be in accordance with Paragraph NC-2559 of the 1977 edition of ASME Section III Code. These on-site examinations will be performed over the next 60 days and the results tabulated for transmittal to NRC in a follow-up report.

Ultrasonic examinations will also be performed on all Callaway pipe spools presently in fabrication at Dravo containing fusion welded SA-312 type 304 pipe. Acceptance criteria and repair provisions will be the same as indicated above. The results of these additional examinations will be included in the follow-up report.

4. This item is applicable to holders of operating licenses only.

5. The ultrasonic examinations being performed at Callaway are scheduled for completion within the next 60 days and will be referenced in the follow-up report. The results of ultrasonic examinations of pipe currently in fabrication at Dravo will also be referenced in this follow-up report which we expect to transmit to NRC by August 10, 1979. The need for further corrective actions will be indicated in the follow-up response.

Union Electric has also researched all safety-related pipe orders initiated by our constructor to see whether any ASME fusion welded SA-312 type 304 stainless steel pipe was purchased directly or indirectly from Youngstown. The investigation revealed that only one purchase order with McJunkin had pipe manufactured by Youngstown. The pipe furnished on this purchase order was manufactured subsequent to mid-November, 1978 under an acceptable quality system at Youngstown.

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If you require additional information in this matter prior to the follow-up report, please contact us.

Very truly yours,

John K. Bryan
John K. Bryan

DES/dls

cc: NRC Office of Inspection & Enforcement w/a
N. A. Petrick w/a
J. L. Turdera w/a

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ENCLOSURE 3
YOUNGSTOWN SA-312 TYPE JOG WELDED (WITHOUT FILLER METAL) PIPING
PROJECT CALLAWAY

ITEM NO.	SPOOL NUMBER	LINE NUMBER	SYSTEM/SERVICE	NOMINAL DIAMETER INCHES	DESIGN		DRAWN'S SKETCH NO.	MATERIAL ITEM ON SKETCH	RECH'TEL. SEQUENCE NO.
					PRESSURE PSIG	TEMPERATURE OF			
1	EJ01-S007	02-ECB-12"	EJ/Shutdown Suction Line Train A.	12"	600	400	E-7	1A, 1B	M-201A-1245
2	EJ01-S008	01-ECB-12"	EJ/Shutdown Suction Line Train A.	12"	600	400	E-8	1	M-201A-1246
3	EJ01-S009	02-ECB-12"	EJ/Shutdown Suction Line Train A.	12"	600	400	E-9	1A, 1B	M-201A-083
4	EJ01-S010	15-ECB-10"	EJ/Pump A to Heat Exchanger A	10"	600	400	E-10	1	M-201A-1247
5	EJ01-S011	15-ECB-10"	EJ/Pump A to Heat Exchanger A	10"	600	400	E-11	1A, 1B, 1C	M-201A-1248
6	EJ01-S012	15-ECB-10"	EJ/Pump A to Heat Exchanger A	10"	600	400	E-12	1	M-201A-1249
7	EJ01-S013	15-ECB-10"	EJ/Pump A to Heat Exchanger A	10"	600	400	E-13	1	M-201A-092
8	EJ01-S014	15-ECB-10"	EJ/Pump A to Heat Exchanger A	10"	600	400	E-14	1A, 1B, 1C	M-201A-1250
9	EJ01-S017	17-ECB-10"	EJ/Heat Exchanger A to Valve HV8002A	10"	600	400	E-17	1A, 1B, 1C	M-201A-1253
10	EJ01-S018	17-ECB-10"	EJ/Heat Exchanger A to Valve HV8002A	10"	600	400	E-18	1A, 1B	M-201A-1254
11	EJ01-S021	15-ECB-10"	EJ/Pump A to Heat Exchanger A	10"	600	400	E-21	1A, 1B, 1C, 1D, 1E	M-201A-1255
12	EJ01-S022	17-ECB-10"	EJ/Heat Exchanger A to Valve HV8002A	10"	600	400	E-22	1, 2A, 2B, 2C	M-201A-1256
13	EJ01-S023	17-ECB-10"	EJ/Heat Exchanger A to Valve HV8002A	10"	600	400	E-23	1A, 1B	M-201A-1257
14	EJ01-S024	40-ECB-10"	EJ/Discharge to SCS Hot Legs & RWT	10"	600	400	E-24	1A, 1B, 1C	M-201A-1258
15	EJ01-S027	17-ECB-10"	EJ/Heat Exchanger A to Valve HV8002A	10"	600	400	E-27	1A, 1B	M-201A-1261

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ENCLOSURE 5
YOUNGSTOWN SA-312 TYPE 304 STAINLESS (WITHOUT FILLER METAL) PIPING
PROJECT COLUMBIAN

ITEM NO.	STEEL NUMBER	LINE NUMBER	SYSTEM/Service	NOMINAL DIAMETER INCHES	DESIGN PRESSURE PSIG	TEMPERATURE OF	DRAWING SKETCH NO.	MATERIAL ITEM ON SKETCH	EPCUTL SEQUENCE NO.
16	EJ01-S028	17-ECB-10"	EJ/Heat Exchanger A to Valve W03809A	10"	600	400	E-28	1	M-201A-1262
17	EJ01-S029	17-ECB-10"	EJ/Heat Exchanger A to Valve W03809A	10"	600	400	E-29	1A, 1B	M-201A-1263
18	EJ01-S030	17-ECB-10"	EJ/Heat Exchanger A to Valve W03809A	10"	600	400	E-30	1	M-201A-1264
19	EJ01-S031	17-ECB-10"	EJ/Heat Exchanger A to Valve W03809A	10"	600	400	E-31	1A, 1B	M-201A-1265
20	EJ01-S032	17-ECB-10"	EJ/Heat Exchanger A to Valve W03809A	10"	600	400	E-32	1, 1A	M-201A-1266
21	EJ01-S033	17-ECB-10"	EJ/Heat Exchanger A to Valve W03809A	10"	600	400	E-33	1A, 1B	M-201A-112
22	EJ01-S034	17-ECB-10"	EJ/Heat Exchanger A to Valve W03809A	10"	600	400	E-34	1	M-201A-1267
23	EJ01-S037	04-RCB-14"	EJ/Heat Suction Line Train A.	14"	240	200	E-788	1A	M-201A-1059
24	EJ01-S038	15-ECB-10"	EJ/Heat A to Heat Exchanger B	10"	600	400	E-466	1	M-201A-643
25	EJ01-S001	09-ECB-12"	EJ/Shutdown Suction Line Train B	12"	600	400	E-38	1A, 1B, 1C, 1D	M-201A-1208
26	EJ01-S002	09-ECB-12"	EJ/Shutdown Suction Line Train C	12"	600	400	E-39	1A, 1B	M-201A-1209
27	EJ01-S003	09-ECB-12"	EJ/Shutdown Suction Line Train D	12"	600	400	E-40	1	M-201A-1210
28	EJ01-S012	16-ECB-10"	EJ/Heat E to Heat Exchanger E	10"	600	400	E-49	1A, 1B	M-201A-1215
29	EJ01-S013	16-ECB-10"	EJ/Heat E to Heat Exchanger E	10"	600	400	E-50	1A, 1B	M-201A-1216
30	EJ01-S014	16-ECB-10"	EJ/Heat E to Heat Exchanger E	10"	600	400	E-51	1	M-201A-122

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ENCLOSURE 5
YOUNGSTON SA-312 TYPE 304 WELDED (WITHOUT FILLER METAL) PIPING
PROJECT CALLAWAY

ITEM NO.	SPEC. NUMBER	LINE NUMBER	SYSTEM/COMPONENT	NOMINAL DIAMETER INCHES	DESIGN		DRAWING SKETCH NO.	MATERIAL ITEM ON SKETCH	REVIEWER SEQUENCE NO.
					PRESSURE PSIG	TEMPERATURE OF			
31	EJ02-S015	16-ECB-10"	EJ/Heat Exchanger B Exchanger 3	10"	600	400	E-52	1	M-201A-121
32	EJ02-S019	16-ECB-10"	EJ/Heat Exchanger B Exchanger 3	10"	600	400	E-56	1A, 1B, 1C 1D, 2	M-201A-1220
33	EJ02-S020	23-ECB-10"	EJ/Heat Exchanger B Discharge to Valve	10"	600	400	E-57	1	M-201A-1221
34	EJ02-S021	23-ECB-10"	Discharge to Valve HV8802B	10"	600	400	E-58	1A, 1B, 1C 1D	M-201A-1222
35	EJ02-S022	23-ECB-10"	Discharge to Valve HV8802B	10"	600	400	E-59	1A, 1B, 1C	M-201A-1223
36	EJ02-S023	60-ECB-10"	EJ/Discharge to RCS Hot Legs & RST	10"	600	400	E-60	1A, 1B, 1C	M-201A-1224
37	EJ02-S024	60-ECB-10"	EJ/Discharge to RCS Hot Legs & RST	10"	600	400	E-61	1A, 1B	M-201A-1225
38	EJ02-S025	60-ECB-10"	EJ/Discharge to RCS Hot Legs & RST	10"	600	400	E-62	1A, 1B	M-201A-1226
39	EJ02-S026	23-ECB-10"	EJ/Heat Exchanger B discharge to Valve HV8802B	10"	600	400	E-63	1A, 1B, 1C	M-201A-1227
40	EJ02-S027	23-ECB-10"	EJ/Heat Exchanger B discharge to Valve HV8802B	10"	600	400	E-64	1A, 1B	M-201A-1228
41	EJ02-S028	23-ECB-10"	EJ/Heat Exchanger B discharge to Valve HV8802B	10"	600	400	E-65	1	M-201A-1229
42	EJ02-S029	23-ECB-10"	EJ/Heat Exchanger B discharge to Valve HV8802B	10"	400	400	E-66	1	M-201A-1229
43	EJ02-S030	23-ECB-10"	EJ/Heat Exchanger B discharge to Valve HV8802B	10"	600	400	E-67	1, 1A	M-201A-1229

ENCLOSURE 5
 YOUNGSTOWN SA-312 TYPE 304 STAINLESS (WITHOUT FILLER METAL) PIPING
 PROJECT CATALAN

ITEM NO.	SPOOL NUMBER	LINE NUMBER	SYSTEM/SERVICE	NOMINAL DIAMETER INCHES	DESIGN PRESSURE PSIG	TEMPERATURE OF	DRAWING SKETCH NO.	MATERIAL ITEM OR SKETCH	RECHTEL SEQUENCE NO.
44	EJ02-S031	23-ECB-10"	EJ/Heat Exchanger A discharge to Valve HV8809B	10"	600	400	E-68	1A, 1B	M-201A-1230
45	EJ02-S032	23-ECB-10"	EJ/Heat Exchanger B discharge to Valve HV8809B	10"	600	400	E-69	1	M-201A-1231
46	EJ02-S033	23-ECB-10"	EJ/Heat Exchanger B discharge to Valve HV8809B	10"	600	400	E-70	1A	M-201A-1232
47	EJ02-S034	23-ECB-10"	EJ/Heat Exchanger B discharge to Valve HV8809B	10"	600	400	E-71	1	M-201A-1233
48	EJ02-S036	40-ECB-10"	EJ/Discharge to RCS Hot legs and F&ST	10"	600	400	E-73	1A, 1B	M-201A-1235
49	EJ02-S037	40-ECB-10"	EJ/Discharge to RCS Hot legs and F&ST	10"	600	400	E-74	1A, 1B	M-201A-1236
50	EJ02-S039	40-ECB-10"	EJ/Discharge to RCS Hot legs and F&ST	10"	600	400	E-76	1A, 1B	M-201A-1237
51	EJ02-S041	40-ECB-10"	EJ/Discharge to RCS Hot legs and F&ST	10"	600	400	E-78	1A, 1B	M-201A-1239
52	EJ02-S042	40-ECB-10"	EJ/Discharge to RCS Hot legs and F&ST	10"	600	400	E-79	1	M-201A-1258
53	EJ02-S043	40-ECB-10"	EJ/Discharge to RCS Hot legs and F&ST	10"	600	400	E-80	1A, 1B	M-201A-1259
54	EJ02-S044	40-ECB-10"	EJ/Discharge to RCS Hot legs and F&ST	10"	600	400	E-81	1A, 1B	M-201A-1260
55	EJ02-S046	41-ECB-10"	EJ/CMBT Panel Line to RCS Hot legs	10"	2665	650	E-83	1A, 1B	M-201A-1262
56	EJ02-S047	11-ECB-14"	EJ/CMBT Section Line from B to HV8809B	14"	260	200	E-84	1A, 1B	M-201A-1263

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ENCLOSURE 5
YOUNGSTOWN SA-312 TYPE 304 WELDED (WITHOUT FILLER METAL) PIPING
PROJECT CALLAWAY

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ITEM NO.	SPOOL NUMBER	LINE NUMBER	SYSTEM/LOCATION	NOMINAL DIAMETER INCHES	DESIGN		DRAWING SKETCH NO.	MATERIAL ITEM ON SKETCH	PROCESS SEQUENCE NO.
					PRESSURE PSIG	TEMPERATURE OF			
57	BN01-S019	12-HCB-14"	BN/Line off 07-HCB to EJ-11-HCB for HIR pump suction	14"	50	125	E-117	1	M-201A-200
58	BN01-S020	12-HCB-14"	BN/Line off 07-HCB to EJ-11-HCB for HIR pump suction	14"	50	125	E-118	1A, 1B	M-201A-201
59	BN01-S021	10-HCB-12"	BN/Line off 07-HCB to EN-06-HCB for CPT Spray pump suction	12"	50	125	E-119	1A, 1B, 1C, 1D	M-201A-202
60	BN01-S024	13-HCB-14"	BN/Line off 07-HCB to EJ-04-HCB for HIR pump suction	14"	50	125	E-122	1	M-201A-205
61	BN01-S025	13-HCB-14"	BN/Line off 07-HCB to EJ-04-HCB for HIR pump suction	14"	50	125	E-123	1A, 1B	M-201A-206
62	BN01-S026	15-HCB-12"	BN/Line off 14-HCB to EN02-HCB, for CPT spray additive eductor	12"	50	125	E-124	1A, 1B, 1C, 1D	M-201A-207
63	BN01-S047	01-HCB-8"	BN/From RMT to PEN01A Suction line	8"	240	200	E-171	1	M-201A-274
64	EC01-S009	100-HCC-10"	EC/Refuelling Pool LOCA Drain.	10"	150	325	E-378	1A	M-201A-499
65	EC01-S010	101-HCC-10"	EC/Refuelling Pool LOCA Drain.	10"	150	325	E-379	1A	M-201A-500